REMARKS

The Applicants appreciate the Examiner's thorough examination of the subject application. Applicants request reconsideration of the subject application based on the claim amendments and following remarks.

Claims 1-3, 5, 6 and 8-11 are currently pending in the application. Claims 1, 10 and 11 have been amended. Claims 3, 8 and 9 have been canceled without prejudice

Support for the amendments to the claims can be found throughout the application as filed. No new matter has been added by the amendments to the specification or the claims.

Claims 1-3, 5, 6 and 8-11 were rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

The Examiner maintains that, in Claims 1 and 2, the term "solid solution" is not clear since one is not able to ascertain whether the claim is referring to a solid or solution. This term renders claims 1 and 2 indefinite, as well as claims 3, 5, 6 and 8-11, since they are dependent from claims 1 and 2.

Applicants respectfully disagree with the Examiner's interpretation of the definition of the term "solid solution' as indefinite. As mentioned in the previously filed Amendment, the term "solid solution" is a term of art used within the scientific community to refer to "a homogenous solid that can exist over a range of component chemicals" (Reference: *WordNet® 1.7*, © 2001; Princeton University)[1]. Definitions of the term "solid solution" from other sources recite meanings of the term which are entirely consistant with the *WordNet®* definition, particularly within a pharmaceutical context. For example, in *Concise Chemical and Technical Dictionary* (Edward Arnold, 1986) solid solution is defined as "in which the solute atoms fit into spaces between those of the

solvent atoms, as well as, "in which the solute atoms replace those of the solvent so that two kinds of atoms are in a common lattice. In the *Dictionary of Scientific and Technical Terms* (McGraw-Hill, Sixth Edition, 2003) "solid solution" is defined as "a homogenous crystalline phase composed of several distinct chemical species, occupying the lattice points at random and existing in a range of concentrations". Also, in *Academic Press Dictionary of Science and Technology* (Academic Press, 1992), "solid solution' is defined as " a homogenous solid mixture whose constituent particle concentrations may vary over specified ranges" and "a solid mixture of two components; if crystalline, the second molecule must replace the first in the crystal structure or else fit between the molecules". Thus, a consensus definition could be stated as " a homogenous solid phase composed of a mixture of chemicals over a range of concentrations". In the context of the present invention, a "solid solution" is a homogenous solid mixture of a drug, an edible polymer and a saccharide with a high elution rate profile.

Furthermore, in the context of pharmaceutical preparations, the term, "solid solution" can be found in U.S. Patent No. 6,264,981, wherein it is referred to as comprising a solid pharmaceutical agent and a dissolution agent. Most particularly, the Examiner is directed to the article, "*Processing Factors in Development of Solid Solution Formulation of Itraconazole for Enhancement of Drug Dissolution and Bioavailability*" in International Journal of Pharmaceuticals, 229 (2001) 193-203, wherein "solid solution" refers to a drug (i.e., itraconazole) that is molecularly dispersed within a solvent which forms a solid with enhanced drug dissolution and bioavailability. As such, Applicants maintain that the term "solid solution" in not indefinite. Copies of all the references cited herein with regard to the definition of "solid solution" are being submitted with this Amendment for the Examiner's review.

In addition, the Examiner maintains that, in Claim 11, the passage "the additional edible polymer is hydoxypropyl cellulose" lacks clear antecedent basis by depending from Claim 1 since "additional edible polymer" is not mentioned in Claim 1. Also in Claim 11, the passage " the starch syrup is reducing maltose starch syrup" lacks clear antecedent basis by being dependent from Claim 1 since "starch syrup" is not mentioned in Claim 1

Claim 10 has been amended to provide antecedent basis for the passage "additional edible polymer", and Claim 11 has been amended to be dependent from Claim 10, thereby obviating these reasons for rejection.

The Claims, as amended, are fully compliant with all the requirements of §112 including the requirements of §112, second paragraph.

Claims 1-3, 5, 6 and 8-11 were rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Ishida et al (U.S. Patent No. 6,042,844, newly cited), in view of Squillante et al. (U.S. Patent No. 6,106,856, newly cited).

The instant claims are directed to a water soluble monolayer film preparation comprising a drug, edible polymer, and either a monosaccharide or an oligosaccharide, wherein the film is formed by spreading and drying and has an elution rate of more than about 50% per 10 minutes and wherein the drug is a compound that forms a solid solution with the edible polymer to enhance internal absorption. As shown in the Examples, the resulting thin film is obtained by spreading and drying which is a simple and economic production method that does not require a machine such as an extruder.

The Examiner maintains that "the Ishida et al patent discloses sheet packs that are used to supply moisture to skin and further discloses beginning at column 1, line 64, process steps for preparing sheet packs, which include spreading and drying a thin film of a film-forming paste-like cosmetic substance, which includes a water-soluble polymer and water as main components; for example, a dry film-like cosmetic article mainly composed of a water-soluble polymer including medical or cosmetic components.....The instant claimed water soluble film preparation differ from the Ishida et al patent by claiming the presence of at least one drug or compound selected from nilvadipone, nifedipine, phenytoin or griseofulvin. However, the Squillante et al patent shows that the presence of a drug that may be selected as nifedipine in a film for transdermal delivery is known in the art". Thus, the Examiner concludes, "One of

ordinary skill in this art would be motivated to combine the teachings of the Ishida et al patent with the teachings of the Squillante et al patent since both patents set forth films as delivery devices through skin".

Applicants respectfully disagree with the Examiner's basis for rejection. The invention of Ishida, et al is a sheet cosmetic pact which is applied to the outer skin , such as the face. In addition, the sheets are multilayered as recited in Claim 1 of the patent and they are not described for oral administration. Furthermore, Ishida et al also does not disclose a drug elution rate of more than 50%/10 minutes.

The invention of Squillante et al is a transdermal preparation. It uses nifedipine, but does not disclose the use of nilvadipine, phenytoin or griseofulvin, nor the combination of nilvadipine, phenytoin or griseofulvin and the edible polymer, monosaccharide or oligosaccharide of the present invention. Furthermore, like Ishida, the invention of Squillante is applied to the outer skin and the drug is incorporated into the body through skin; it is a laminated preparation and not monolayered; it is not disclosed for oral administration; and is not described with a drug elution rate of more than 50%/10 minutes.

There is no motivation to combine the teachings of Ishida and Squillante and even if they were combined, the resulting preparation would be a multilayered medicament for transdermal administration with drug elution rates not greater than 50%/10 minutes. As such, the oral administration of a monolayered film preparation of the Applicants' invention could not be obtained by combining the teachings of Ishida et al and Squllante et al.

Claims 2 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Ishida et al (U.S. Patent No. 6,042,844, newly cited), in view of Squillante et al. (U.S. Patent No. 6,106,856, newly cited) as applied to Claims 1-3, 5, 6 and 8-11 above, and in further view of Fuchs et al (US Patent No. 4,136,145, already of record).

The Examiner maintains ".....The above listed film forming polymer and fillers of the Fuchs et al patent embrace the edible polymer, monosaccharide, oligosaccharide or maltose starch syrup of the instantly claimed invention. The Fuchs et al patent discloses that the proportion of pharmaceutically active ingredients in the film may be from a pharmaceutically effective trace amount up to about 60% by weight of the film, which covers the amount of drug set forth in instant Claim 2. The Fuchs et al patent also discloses by weight of the film-forming polymer and up to 30% by weight of a filler, which is within the range of the amount of edible polymer and monosaccharide or oligosaccharide that is set forth in instant Claim 2. The Fuchs et al patent discloses medicinally active substances that may be admixed in a film (see column 2, lines 60-64).". Thus, one of ordinary skill in this art would be motivated to combine the teachings of the Ishida, et al. Squillante et al and Fuchs et al patents in a rejection of the instant claims under 35 U.S.C. 103 since each patent discloses compositions in the form of water-soluble films comprising a pharmaceutical composition in the form of films.

Applicants respectfully disagree with the Examiner's basis for rejection. The preparation of Fuchs et al is for enteral or topical administration (see column 1, lines 12-16), not oral administration. Furthermore, as discussed above, the preparations of Ishida et al and Squillante et al also are not described for oral administration. As such there is no motivation to combine the teachings of these three patent documents to achieve the present invention. Indeed, even if the teachings were combined, the resulting medicament would be suited for enteral or transdermal administration and not for oral administration. Furthermore, one of ordinary skill in this art would not obtain a monolayered film preparation for oral administration which comprises nilvadipine, phenytoin or griseofulvin; the edible polymer, sorbitol or reducing maltose starch syrup as a monosaccharide or oligosaccharide; and the drug elution rate of more than 50%/10 minutes of the present invention.

Consequently, one of ordinary skill in the art would not have been motivated to combine the teachings of Fuchs et al, Ishida, et al, and Squillante et al to achieve film preparations with the elution rates of the present invention.

In summary, reconsideration of this application and the allowance of Claims 1-3, 5, 6 and 8-11 of this application as hereinabove amended in response to this communication are respectfully requested for the reasons stated above.

The Applicants respectfully disagree with the Examiner's assessment that the Applicants' previously filed amendment necessitated the new ground(s) of rejection and, accordingly, the Action was made FINAL (see MPEP § 706.07(a)). The Amendment filed on August 26, 2003, amended the claims to clarify the solubility characteristics of the film preparations as" water" soluble. As noted throughout the application, the film preparations of the present invention are rapidly dissolved and soluble in the oral cavity. Saliva, which is the liquid found in the oral cavity, is comprised mostly of water. Therefore, the film preparations of the present invention were effectively described as "water" soluble. Indeed, the Examiner has accepted this position in the regard that the 35 U.S.C. 112 rejection of the Office Action issued February 26, 2003 relating to solubility has not been maintained in the current Office Action under consideration. Therefore, Applicants submit that the Finality of the current Office Action is improper and request that it be withdrawn.

Lastly, in light of the Examiner's comments in the Advisory Action issued on February 23, 2004, Applicant's respectfully request an interview with the Examiner to discuss the merits of the claims for the present application.

Applicants believe that additional fees are not required in connection with the consideration of this response to the currently outstanding Official Action. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. **04-1105**, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

Respectfully submitted,

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